

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

A. CHANNEL TYPES - VOICE GRADE (Cont'd)

7. Type 2007 - A two-wire interface with effective two-wire facilities engineered for a 1000 Hz loss of 0 to 6 dB. Furnished for voice transmission between a telephone answering service concentrator located in a Telephone Company office and an identifier located at a customer premises. For two-point service.
8. Type 2008 - A two-wire interface with effective two-wire facilities engineered for a 1000 Hz net loss of 0 to 6 dB. Normally suitable for voice transmission between a telephone answering service concentrator located at a premises of a customer and an identifier located at a different premises. For two-point service.

TEXT DELETED AND REMOVED FROM TARIFF

(D)

(D)

10. Type 2010 - A two-wire or four-wire interface with four-wire facilities furnished for voice transmission. Provided for tie line use between two PBX's; a PBX and a Centrex Switching unit; or between a customer-provided Communications System (facilities) and a Centrex Switching unit. Channel terminated in a PBX or for connection to a customer provided Communications System. Requires signaling arrangement as specified in 3.2.2 B following. For two-point service.
11. Type 3002 - A four-wire interface with four-wire facilities engineered for a 1000 Hz net loss of 16 dB. Suitable for data transmission. Furnished for two point service or for multipoint service.
12. Type 3003 - A two-wire interface with effective two-wire facilities engineered for a 1000 Hz net loss of 16 dB for data transmission. Furnished for two point service or for multipoint service.
13. Type 3040 - A two-wire interface with effective two-wire facilities engineered for a 1000 Hz net loss of 30 dB for Dataphone Select-A-Station Service or Summation Active Bridging.
14. Type 3041 - A four-wire interface with four-wire facilities engineered for a 1000 Hz net loss of 30 dB for Dataphone Select-A-Station Service.

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

A. CHANNEL TYPES - VOICE GRADE (Cont'd)

15. Type 3050 - A two-wire interface with effective two-wire facilities engineered for 1000 Hz net loss at 10 dB for use exclusively with Split Band Active Bridging.
16. Type 3060 - furnished for transmission rates up to 9600 bps, for use with ACOIM. (N)
17. Type 3061 - furnished for a transmission rate of 19.2 Kbps, for use with ACOIM.
18. Type 3062 - furnished for a transmission rate of 56 Kbps, for use with ACOIM.

Channel types 3060, 3061 and 3062 preceding are furnished for use exclusively with the Ameritech Central Office Information Manager (ACOIM) Service and are available only on an intraLATA interwire center channel (IWCC) basis. ACOIM service may be found in P.S.C. of W. 1, Section 9. (N)

Type 2001, 2002, 2003, 2004, 3002, 3003, 3040, 3041, and 3050 local channels are not suitable for switching and/or tandem operation to the public switched network or other private line services.

B. SIGNALING ARRANGEMENTS FOR VOICE GRADE CHANNELS

1. Ringdown Signaling
 - a. Channel type 2001 does not include arrangements for signaling or talk battery.
 - b. Channel type 2001 two-way automatic signaling option provides ringing and talk battery between stations on two point channels. Rates apply per channel.
 - c. Manual ringdown signaling option provides the capability on the channel to accommodate signaling from and to terminal equipment arranged to provide manual signaling. Rates apply per channel.
2. Loop Signaling, for use with channel type 2005, is furnished for use with grandparented and registered PBX or similar equipment in accordance with Part 68 of the FCC Rules and Regulations. Connection regulations are contained in Section 10 of this tariff and Section 8 of PSC of W 1.
 - a. Type A - Furnished for use with Class A PBX (or similar) station ports capable of operation over loops with resistance in the range of 0-199 ohms.

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

B. SIGNALING ARRANGEMENTS FOR VOICE GRADE CHANNELS (Cont'd)

2. (Cont'd)

- b. Type B - Furnished for use with Class B PBX (or similar) station ports capable of operation over loops with resistance in the range of 200-899 ohms.
- c. Type C - Furnished for use with Class A PBX (or similar) station ports capable of operation over loops with resistance in the range of 900 ohms or more.

(M)

(M)

- 3. E & M Signaling, for use with channel type 2010, is furnished for use with grandparented and registered PBX or similar equipment in accordance with Part 68 of the FCC Rules and Regulations. Connection regulations are contained in Section 10 of this tariff and Section 8 of P.S.C. of W. 1.

(T)

- a. An E & M Signaling Arrangement is required for each tie line termination, operating in a Dial Repeating mode, at a customer premises with a registered PBX.
- b. An E & M Signaling Arrangement is required for each tie line termination at a customer premises with a grandparented PBX when the tie line is arranged with an E&M signaling interface.
- c. An E & M Signaling Arrangement is not required for additions to or for new installations of grandparented PBX equipment when not arranged with an E&M signaling interface.

C. CONDITIONING

- 1. Type C Conditioning provides assured transmission quality for frequency response and envelope delay distortion as specified below:

Type C2 - For a two point or multipoint channel

- Frequency Response 300-3000 Hz, -2dB to +6dB
500-2800 Hz, -1dB to +3dB
- Envelope Delay Distortion Less than 500 microseconds, 1000-2600 Hz
Less than 1500 microseconds, 600-2600 Hz
Less than 3000 microseconds, 500-2800 Hz

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

C. CONDITIONING (Cont'd)

1. (Cont'd)

Type C4 - For a two point or three point channel

- Frequency 300-3200 Hz, -2dB to +6dB
- Response 500-3000 Hz, -2dB to +3dB
- Envelope Less than 300 microseconds, 1000-2600 Hz
- Delay Less than 500 microseconds, 800-2800 Hz
- Distortion Less than 1500 microseconds, 600-3000 Hz
- Less than 3000 microseconds, 500-3000 Hz

2. Type D1 Conditioning provides assured transmission quality as specified below on two point circuits only. The Telephone Company does not warrant or represent that the channel so conditioned will be suitable for voice transmission.

Signal to C-Notched Noise Ratio	28dB
Non linear distortion:	
Signal to second order distortion	35dB
Signal to third order distortion	40dB

D. MULTIPOINT SERVICE OPTIONS - VOICE GRADE CHANNELS

1. General

Multipoint service provides for communications capability between more than two station locations. Bridging or hubbing arrangements located in Telephone Company wire centers are required to join multiple local channels, and if needed, an inter-wire center channel, in order to provide these service options.

Basic and other standard arrangements are described in the paragraphs that follow. Rates for these services are in 3.5 following.

(D)
|
(D)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

D. MULTIPOINT SERVICE OPTIONS - VOICE GRADE CHANNELS (Cont'd)

1. General (Cont'd)

Inside wiring arrangements may be used to provide additional terminations of local channels. Local channels are terminated once at each premises. Additional terminations achieved by using premises wiring do not constitute additional points of a multipoint channel. Premises wiring services are available under P.S.C. of W. 1. For BELL Channel Services, intrasystem wiring charges apply. (T)

Though multiple termination of channels on a customer's premises is permitted, transmission cannot be guaranteed. For example, type 2001 and 2002 channel designs do not contemplate that more than one station at a point be on line at the same time. (C)
(T)
(D)

Customers may have multiple channel circuit legs terminated at the same premises. Charges identical to the first circuit leg at the premises apply, for each additional leg. (D)

2. Basic Arrangements

- a. Broadcast - The broadcast multi-point consists of a single master station which transmits to two or more stations. There is no return path to the master station and remote stations cannot communicate with each other. Broadcast arrangements utilize two-wire channels. A maximum number of points for this arrangement is not specified. (C)
(C)
- b. Conference - The conference multi-point consists of a number of stations (points) connected together so that transmissions of any station are received by all stations. Conference arrangements using two-wire local channels are limited to 6 points. Conference arrangements using four-wire local channels are normally limited to 20 points. Provision of arrangements with more than 20 points may result in additional charges based on additional costs. (D)

TEXT DELETED NOW APPEARS ON PAGE 2, RELEASE 1.1

(M)
|
(M)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

D. MULTIPOINT SERVICE OPTIONS - VOICE GRADE CHANNELS (Cont'd)

2. Basic Arrangements (Cont'd)

- c. Broadcast Polling (data only) - The broadcast polling multi-point consists of a single master station and two or more remote stations. Transmissions from the master station are received by all remote stations. Transmissions from the remote station are received only by the master station. Arrangements using two-wire local channels are limited to 6 points. The number of points allowed on an arrangement using four-wire local channels is that number that, in the opinion of the Telephone Company, may be supported using normal routing while maintaining acceptable transmission performance.

3. Telemetry/Alarm Bridging Service (TABS)

a. Service Description

- (1) Telemetry/Alarm Bridging Service is a multi-station, voice frequency, BELL Channel Service arrangement designed to provide connections (T) between a master station and a number of remote stations simultaneously. Remote stations are not in direct communication with (C) each other. This service is suitable for multi-point voice frequency, (C) data or tone signaling arrangements, with transmission rates up to 400 (C) baud.

- (2) TABS is provided in the following arrangements.

(a) Split Band, Active Bridging

A bridging arrangement consisting of a 4-wire (master station or mid-link channel) frequency split common port and multiple 2-wire (remote station) ports for use in multi-point voice frequency, data or tone signaling arrangements. Two-way (polling) communication occurs between the master station and each remote station. (C)

(b) Summation, Active Bridging

A bridging arrangement utilizing tone signaling consisting of a 2-wire (master station or mid-link channel) common port and multiple 2-wire (remote station) ports. A one-way communication path exists from each remote station to the master station. (C)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

D. MULTIPOINT SERVICE OPTIONS - VOICE GRADE CHANNELS (Cont'd)

3. Telemetry/Alarm Bridging Service (Cont'd)

b. Regulations

- (1) No more than 136 remote stations may be connected to a master station over an individual Split Band Active Bridging or Summation Active Bridging system.
- (2) A primary bridge is capable of supporting a maximum of two secondary bridges.
- (3) In Split Band Active Bridging and Summation Active Bridging arrangements, secondary bridges may be located in either the same wire center as the primary bridge, or in a wire center different from the primary bridge. Secondary bridges must be directly connected to the primary bridge via mid-link channels. Secondary bridges cannot be connected through other secondary bridges, nor can secondary bridges support subtending bridges. (D)
- (4) Secondary bridges, utilized in Split Band Active Bridging arrangements, reduce the 2-wire remote station capacity of the primary bridge. Each secondary bridge reduces the primary bridge capacity by four 2-wire remote station connections.
- (5) Each secondary bridge utilized in Summation Active Bridging arrangements reduces the 2-wire remote station capacity of the primary bridge by one.
- (6) Access Lines
 - (a) Access from the master station to a primary bridge in the same wire center as the master station is through a type 3002 local distribution channel for Split Band Active Bridging and through a type 3003 local distribution channel for Summation Active Bridging. Where the primary bridge is located in a wire center different than that serving the master station, a 3002 or 3003 inter-wire center channel is required in addition to the local distribution channel. (C)
(C)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.2 DESCRIPTION OF VOICE GRADE CHANNELS AND SERVICES (Cont'd)

D. MULTIPOINT SERVICE OPTIONS - VOICE GRADE CHANNELS (Cont'd)

3. Telemetry/Alarm Bridging Service (Cont'd)

b. Regulations (Cont'd)

(6) Access Lines (Cont'd)

(b) Access from a bridge to a remote station in the same wire center is through a type 3050 local distribution channel for Split Band Active Bridging or a type 3040 local distribution channel for Summation Active Bridging. When the station is located in a wire center different than that in which the bridge is located, a 3040 or 3050 inter-wire center channel is required in addition to the local distribution channel. Remote channel connections, as specified in 3.5.2 following, apply to each remote station channel connected to a Split Band Active Bridging arrangement.

(c) Mid-link channels are used to connect secondary bridges to primary bridges. Split Band Active Bridging and Summation Active Bridging mid-link channels consist of type 3002 local distribution channels when the bridges reside in the same wire center. Mid-link channels consisting of both local distribution channels and inter-wire center channels are required between bridges located in different wire centers. Mid-link channel connections apply to each connection between bridges for a Split Band Active Bridging Arrangement.

E. APPLICATION OF LINE POWER

1. Where facilities permit, line power may be ordered from the Telephone Company for use with channel types: 2001, 9001, and 9002.
2. A Design Order Charge applies if Telephone Company provided line power is ordered subsequent to the order which installs the service to which the power is to be applied.

(N)

(N)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.3 DESCRIPTION OF CHANNELS AND SERVICES ABOVE VOICE GRADE

Audio channels are provided for the closed circuit (non-broadcast) uni-directional transmission of voice and music signals. Service is provided on a two-point basis only, except that Music Distribution Network service may be established through Telephone Company provided distributing centers in configuration with channels as described below. Audio service is made up of local distribution channels and inter-wire center channels as required of the types described below. Removal of load coils for Type 6060 or Type 6070 local channels will be performed at customer request. The customer will be billed a non-recurring charge based on costs incurred. (C)

A. CHANNEL TYPES - ABOVE VOICE GRADE

1. For two point service, or from a music source to a distributing center: (T)
 - a. Type 6060 - A two-wire service engineered for a 1000 Hz maximum loss of 12 dB without equalization on the local portion, and an unequalized inter-wire center channel with characteristics similar to voice grade channels. (T)
 - b. Type 6061 - A two-wire service engineered for a 1000 Hz maximum pre-equalized loss of 12 dB and equalized to ± 1 dB of the 1000 Hz loss from approximately 100 to 5000 Hz on the local portion, and an equalized inter-wire center channel with a frequency range of approximately 100 to 5000 Hz. (T)
 - c. Type 6062 - A two-wire service engineered for a 1000 Hz maximum pre-equalized loss of 12 dB and equalized to ± 1 dB of the 1000 Hz loss from approximately 50 to 8000 Hz on the local portion, and an equalized inter-wire center channel with a frequency range of approximately 50 to 8000 Hz. (T)
2. For a music distribution network from a music distributing center to the premises of the patrons of a wired music service with the following characteristics:
 - a. Type 6070 - A two-wire local channel engineered for a 1000 Hz maximum loss of 14 dB without equalization, and an unequalized inter-wire center channel with characteristics similar to voice grade. (T)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.3 DESCRIPTION OF CHANNELS AND SERVICES ABOVE VOICE GRADE (Cont'd)

A. CHANNEL TYPES - ABOVE VOICE GRADE (Cont'd)

2. (Cont'd)

- b. Type 6071 - A two-wire local channel engineered for a 1000 Hz maximum pre-equalized loss of 14 dB and equalized to ± 4 dB of the 1000 Hz loss from approximately 100 to 5000 Hz, and an equalized inter-wire center channel with a frequency range of approximately 100 to 5000 Hz. (T)
- c. Type 6072 - A two-wire local channel engineered for a 1000 Hz maximum pre-equalized loss of 14 dB and equalized to ± 4 dB of the 1000 Hz loss from approximately 50 to 8000 Hz, and an equalized inter-wire center channel with a frequency range of approximately 50 to 8000 Hz. (T)

B. DISTRIBUTING CENTERS

Distributing Centers consisting of amplification and bridging capable of serving up to 200 stations are provided in the Telephone Company central office. Music distribution networks are established through provision of inter-wire center and local distribution channels which connect a distributing center to a music source, a receiving station location or another distributing center as required.

3.2.4 DESCRIPTION OF CHANNELS AND SERVICES FOR SPECIAL APPLICATIONS

Channels for special applications are generally not in accord with the normal plan of furnishing telecommunication services.

A. SPECIAL DIGITAL CHANNEL TYPE 8806

1. Description

The Special Digital Channel Type 8806 consists of a two-wire interface with two-wire facilities. It is engineered for a loss not to exceed 45 dB at 72 kilohertz. This channel is normally suitable for provision of remote service capability in association with Switched Digital Service. In this capacity it is made up of an Inter-Wire Center Channel and one Local Digital channel, Band 1 or Band 2, as appropriate. It is furnished for two-point service only.

2. Regulations and Limitations

- a. This channel is subject to transmission specifications and limits as described in Bellcore Technical Reference PUB TR-NPL-000457.

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.4 DESCRIPTION OF CHANNELS AND SERVICES FOR SPECIAL APPLICATIONS (Cont'd)

A. SPECIAL DIGITAL CHANNEL TYPE 8806 (Cont'd)

2. Regulations and Limitations (Cont'd)

b. The Band 1 Local Digital Channel (LDC) constitutes the portion of the service between the customer premises and the serving wire center, where the airline distance is 2 miles or less. Where the airline distance is greater than 2 miles service is provided by means of the Band 2 Local Digital Channel. Within each band, these channels are not mileage sensitive.

c. Provision of Local Digital Channels depends on the availability of suitable facilities.

B. SPECIAL SIGNALING CHANNEL TYPE 9001

1. Description

A two-wire interface with two-wire facilities for direct current transmission (metallic continuity) with signaling speeds not to exceed 30 baud. Normally suitable for remote metering, supervisory control and miscellaneous signaling purposes. Furnished for two-point service.

2. Limitations and Regulations

a. The description and the provision of rates for this channel are in recognition of the historic utilization of the metallic characteristics of Telephone Company facilities for direct current transmissions not exceeding 30 baud. Such metallic continuity facilities are rapidly being replaced with newer transmission technologies. The Telephone Company will notify existing customers at least 120 days prior to the removal of such facilities.

b. The electrical characteristics of a facility used to provide this service will depend upon the nature of the available telephone plant and will vary from service to service. The Telephone Company assumes no obligation to specially select, alter, rearrange or construct facilities and does not represent that a facility provided under this subsection is suitable for the intended customer application.

c. Power is typically provided to the channel by the CPE. The CPE power supply must be adjusted to meet the requirements of the Telephone Company provided channel.

Telephone Company provided line power is an available option. See Section 3.2.2.E of this tariff for details.

(C)(M)

(C)(M)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.4 DESCRIPTION OF CHANNELS AND SERVICES FOR SPECIAL APPLICATIONS (Cont'd)

B. SPECIAL SIGNALING CHANNEL TYPE 9001 (Cont'd)

2. Limitations and Regulations (Cont'd)

TEXT DELETED NOW APPEARS ON PAGE 13, RELEASE 1.3

(M)

- d. Use of Special Signaling Channel Type 9001 is subject to transmission specifications and limits as described in Bell System Preliminary Technical Reference PUB. 41001 titled "30-Baud Private Line Channels Interface Specifications," dated December, 1967 and any relevant succeeding publications. The Telephone Company may require that the purpose for which a channel is used be made known. Interconnection protection criteria and regulations as described in Section 10 of this tariff shall apply.

C. SPECIAL SIGNALING CHANNEL TYPE 9002

1. Description

A two-wire interface with two-wire facilities for use in McCulloh Loop applications (low-speed unidirectional series-operated signaling not to exceed 30 baud). Furnished for two-point or multi-point service.

2. Regulations and Limitations

- a. Special Signaling Channel type 9002 is provided either by means of metallic channels or by other means at the discretion of the Telephone Company. Dependent upon the means of provision, variation in the operation of systems connected to a multi-point channel may arise.
- b. The Telephone Company will notify the customer of the type of facility arrangement to be supplied prior to installation. The Telephone Company assumes no obligation to continue providing metallic facilities where rearrangements or changing service requirements necessitate their elimination. The customer will be notified 120 days prior to the removal of metallic facilities.
- c. Power is typically provided to the channel by the CPE. The CPE power supply must be adjusted to meet the requirements of the Telephone Company provided channel.

(C)

Telephone Company provided line power is an available option. See Section 3.2.2.E of this tariff for details.

(C)

- d. Multi-point service is subject to a maximum of 26 points served from a total of no more than 3 wire centers. Under certain conditions, lower limits may result from facility/equipment limitations.

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.4 DESCRIPTION OF CHANNELS AND SERVICES FOR SPECIAL APPLICATIONS (Cont'd)

D. LOCAL AREA DATA CHANNELS

1. Description

Local Area Data Channels provide channels suitable for base band transmission of data signals. Service between non-continuous property locations is limited to two-point channels within the same wire center serving area, to points that are not more than six (6) facility route miles apart. Channel definitions are listed by local channel types, although the limits and specifications apply to the overall facility.

Local Area Data Channels are provided subject to the availability of suitable facilities, using normal cable routing between the points to be served. In the event that the only available facilities require removal of bridged tap or load coils to be made suitable for the intended application, such removal will be performed at the request of the customer at additional charges based on the cost incurred in each individual circumstance.

2. Regulations

- a. Local Area Data Channels are not provided for connection to the public switched network. (T)(M)
(M)
- b. Provision of Local Area Data Channel service is subject to the availability of existing facilities. New facilities will not be constructed in order to provide this service. The Telephone Company assumes no obligation to continue such provision where rearrangements or changing service requirements necessitate the elimination of such facilities or render such facilities unsuitable for the customer application. The customer will be notified 120 days prior to the removal of such facilities. (T)
(C)
(C)
(N)
(N)
- c. Local Area Data Channel service is offered only for balanced transmission of data signals conforming to the signal power limitations and other parameters specified in Bell System Technical Reference, PUB 41028 in addition to criteria and regulations described in Section 10 of this tariff. (T)
- d. The customer is responsible for specifying the maximum facility route miles allowable for the intended application based on transmission specifications in 3. following. The Telephone Company will determine if a suitable channel is available to meet the customer's requirement. (T)
(D)

3 CHANNELS

3.2 DESCRIPTION OF CHANNELS AND SERVICES (Cont'd)

3.2.4 DESCRIPTION OF CHANNELS AND SERVICES FOR SPECIAL APPLICATIONS (Cont'd)

D. LOCAL AREA DATA CHANNELS (Cont'd)

(T)

3. Channel Parameters

Transmission specifications for Local Area Data Channels are dependent upon the route length and the character of the facilities utilized to provide the service. The insertion loss specifications below are expected maximums at the frequency indicated when the circuit is terminated in 135 ohm resistive impedances at both ends. Actual insertion loss may vary depending upon the exact length and type of cable facilities utilized to provide the channel.

<u>Facility Length-Miles</u>	<u>Insertion Loss in dB at 1,000Hz¹</u>
1	10.5
2	14.5
3	18.0
4	21.0
5	23.5
6	26.5

Insertion loss at other frequencies and additional parameters are as stated in Bell System Technical Reference, PUB 41028.

4. Local channels

Local channels for Local Area Data Channels are available as follows:

Type 9080 - A two-wire interface with two-wire facilities; channel parameters as stated above.

Type 9081 - A four-wire interface with four-wire facilities; channel parameters as stated above.

NOTE 1: Insertion loss is referenced to 135 ohm resistive terminations at each end.

3 CHANNELS

3.3 MISCELLANEOUS SERVICES

A. PROTECTIVE EQUIPMENT

1. Description

Protective equipment is provided for voice and signal channel services furnished at power generating stations and substations which may be subject to high ground potential during fault conditions. The special protection equipment is designed to isolate or neutralize the fault produced hazardous voltages.

2. Protection Service Types

The protection services offered are identified according to the following types:

- a. Type 1 - For services requiring either dc transmission or ac and dc transmission used for basic exchange telephone service and/or Bell Channel Service.
- b. Type 2 - For Bell Channel Services requiring either dc transmission or ac and dc transmission used for pilot wire protective relaying or dc tripping.
- c. Type 3 - For Bell Channel Services requiring ac transmission only used for telemetering, supervisory control, data, etc.
- d. Type 4 - For Bell Channel Services requiring ac transmission only, used for audio tone protective relaying.
- e. Wideband - For Bell Channel Services requiring protection up to 1.544 Mhz.
- f. Type 5 - For any of the protection services listed above. (N)

3. Service Performance Objective Classification

Interruptions or outages due to the effects of faults in the customer's power generating, transmission, and/or distribution systems are minimized through the installation and maintenance of high voltage protection service which is designed to operate in a fault - produced electrical environment.

Because of the customer's need for service continuity during power system faults on some types of telecommunication services provided to power stations, the following system of Service Performance Objective Classifications has been established for the purpose of permitting the customer to specify the performance objectives for most types of telecommunications services provided to power stations.

3 CHANNELS

3.3 MISCELLANEOUS SERVICES (Cont'd)

A. PROTECTIVE EQUIPMENT (Cont'd)

3. Service Performance Objective Classification (Cont'd)

- a. Class A - Noninterruptible service performance (must function before, during, and after the fault condition). Class A service cannot tolerate even a momentary service interruption.
- b. Class B - Self restoring interruptible service performance (must function before and after the power fault condition). Class B service can tolerate a service interruption for the duration of a power system fault but service continuity must be restored immediately after the fault without requiring any repair personnel activity.
- c. Class C - Interruptible service performance (can tolerate a station visit to restore service). Class C service can tolerate a service interruption which requires a station visit by repair personnel to restore service.

3.4 INTER-WIRE CENTER EXCHANGE SERVICE

Inter-Wire Center Exchange Service (IWCES) is exchange service furnished from a wire center other than that from which the customer's service is normally provided. IWCES may be provided between wire centers in the same or different exchanges.

(C)
(C)

3.4.1 SERVICE COMPONENTS

A. GENERAL

There are three basic service components for IWCES:

- a type 2006 inter-wire center channel
- a type 2006 local distribution channel
- a single party, non-public exchange line.

Rates and charges for type 2006 channels are in section 3.5 following. Rates for Wisconsin Bell exchange lines appear in P.S.C. of W. No. 1. This service is not available in connection with public or semi-public telephone service. Optional calling to the Milwaukee Metroplan area is not available with IWCES.

3 CHANNELS

3.4 INTER-WIRE CENTER EXCHANGE SERVICE (Cont'd)

3.4.1 SERVICE COMPONENTS (Cont'd)

B. METROPLAN OUTLYING AREA DIFFERENTIALS

In addition to the three basic service components for IWCES, Metroplan Outlying Area Differentials apply at the rates following when the IWCES customer's service location is outside of the Milwaukee Metroplan Area.

	<u>USOC</u>	<u>Monthly Rate</u>
1. Metroplan Outlying Area Differential Number 1	FVWX1	\$70.00

- a. Wire Centers and prefixes (all area code 414) to which the rate applies:

<u>Wire Center</u>	<u>Prefixes</u>
Big Bend	662
Caledonia	835
Cedarburg	243, 375, 377
Hartland	367, 369
Merton	538
North Lake	966

	<u>USOC</u>	<u>Monthly Rate</u>
2. Metroplan Outlying Area Differential Number 2	FVWX2	\$35.00

- a. Wire Centers and prefixes (all area code 414) to which the rate applies:

<u>Wire Center</u>	<u>Prefixes</u>
County Line	238, 242, 354, 355, 357, 362, 365
Muskego	422, 679
Pewaukee	691, 695
Pilgrim Road	251, 253, 255
Sussex	246
Waukesha	521, 524, 542, 544, 547, 548, 549, 574, 896

(N)

3 CHANNELS

3.4 INTER-WIRE CENTER EXCHANGE SERVICE (Cont'd)

3.4.2 INTER-WIRE CENTER STATION SERVICE

Inter-Wire Center Station Service is similar to IWCES except that the customer's exchange service is extended to a second location. The service may be extended to a location within the same wire center serving area as the primary location, or in the serving area of the wire center which provides dial tone.

(C)
|
(C)

	<u>USOC</u>	<u>Non-Recurring Charge</u>	<u>Monthly Rate</u>
Station Bridging Service Option	EHA	\$200.00	\$ 5.00

3.4.3 WIRE CENTER STATION SERVICE

A. GENERAL

Wire Center Station Service is the extension of a non-public exchange line to a second location within the same wire center serving area. The customer's secondary location is the location not listed in the directory.

(C)
(C)(M)
(M)

B. RATE APPLICATION

In addition to the rates and charges for exchange service, a Station Bridging Service Option shown in 3.4.2 preceding and Type 2006 local distribution channel recurring rates and per channel non-recurring charges apply.

(M)(D)

3.5 RATES AND CHARGES

3.5.1 GENERAL

A. RATES AND CHARGES

BELL Channel Services (BCS) will be provided at levels above costs incurred by Wisconsin Bell, Inc. and at or below the maximum rates contained in this tariff. Price changes will be furnished to the Commission a minimum of ten days prior to their effective date. Affected customers will be notified at the same time. New costs must be submitted to the Commission at least 30 days before they may be used as a basis for price changes.

3 CHANNELS

3.5 RATES AND CHARGES (Cont'd)

3.5.1 GENERAL (Cont'd)

B. APPLICATION OF NON-RECURRING CHARGES

Non-recurring charges for channels and services described in Section 3 of this tariff include work done up to the point of minimum penetration and are applied on a per design order, per channel basis. Service connection charges contained in P.S.C. of W. 1 do not apply to these channels or services unless otherwise stated. Extension of network terminating or inside wire used in conjunction with BELL Channel Services is work done on the customer side of the minimum point of penetration and is subject to service connection charges contained in P.S.C. of W. 1. (C)
(C)
(C)
|
(C)

1. Per channel charges apply for each channel connecting the same terminating points. Specific per channel charges for each part, i.e., local distribution channels, inter-wire center channels, etc., are cumulatively applied for the overall per channel charge.
2. Per design order charges apply cumulatively to the parts of the overall channel. However, they apply only once per occasion of a customer's request for identical services connecting the same terminating points.
3. Non-recurring charges for the Special Digital Channel Type 8806, which provides remote service capability for Switched Digital Service, are in addition to the installation charges shown in P.S.C. of W. No. 1. However, the Design Order Charge shown in Section 3.5.2 of this Tariff, applies instead of the Design Order Charge in P.S.C. of W. No. 1, which is applicable to Switched Digital Service provided within the same wire center serving area as the location of the switch.
4. A special billing option is available to Inter-Wire Center Exchange Service (IWCES) or Inter-Wire Center Station Service (IWCSS) customers. (N)

When ordering service, the customer may choose a reduced Design Order Charge of \$250.00. To qualify for this special billing option, the service must continue unchanged for 12 months at the same address. If disconnected prior to the 12 month period, a termination liability applies, which is the difference between the \$250.00 Design Order Charge actually paid and the full Design Order Charge which would have otherwise been applicable.

This option is limited to customers whose telephone service consists entirely of:

- A single exchange line (IWCES, IWCSS or local) (N)
- One local exchange line and one IWCES or IWCSS line (N)

3 CHANNELS

3.5 RATES AND CHARGES (Cont'd)

3.5.1 GENERAL (Cont'd)

C. INSTALLMENT PAYMENT PLAN FOR NON-RECURRING CHARGES

Customers may, at the time of ordering, elect to pay non-recurring charges for BELL Channel Services in consecutive equal monthly installments over a period of three months.

D. APPLICATION OF RECURRING RATES

Recurring rates apply for each channel, service or option described in this section on a monthly basis unless otherwise noted.

E. APPLICATION OF MULTI-POINT CHANNEL RATES

Multi-point channels are bridged and serviced from the wire center. Multi-point circuit legs within a wire center serving area are to be rated as local distribution channels of the same channel type unless otherwise specifically noted in this tariff. Bridging equipment and other multi-point related service options apply, as appropriate, in addition to the rates and charges for multi-point channels.

F. MULTIPLE CHANNEL DISCOUNT

When five or more 2000 or 3000 series type channels of the same type (e.g., 2001) connect the same customer or user locations over a Telephone Company determined route, a 10% discount of monthly rates applies to those channels over four.

TEXT DELETED AND REMOVED FROM TARIFF

(D)

(D)

WISCONSIN BELL, INC.

BELL CHANNEL SERVICES
TARIFF

P.S.C. of W. 4
PAGE 22.1
RELEASE 1.2
AMENDMENT NO. 2259

3 CHANNELS

3.5 RATES AND CHARGES (Cont'd)

3.5.1 GENERAL (Cont'd)

TEXT DELETED AND REMOVED FROM TARIFF

(D)

(D)

3 CHANNELS

3.5 RATES AND CHARGES (Cont'd)

3.5.2 RECURRING AND NON-RECURRING CHARGES

(C/M)

A. CHANNELS

CHAN- NEL TYPE	CLASS OF SERVICE	CHANNEL ELEMENT	BILLING INCREMENT	USOC	CURRENT MONTHLY RATE	MAXIMUM MONTHLY RATE	NON- RECURRING CHARGES per channel	DESIGN ORDER CHARGE per order	
1050	TWP7L (teletype) DAT8L (data) RMT7L (misc)	WCC	initial 1/4 mile	1L9X6	\$60.00	\$ 75.00	\$25.00	\$450.00	
			subsequent 1/4 mile	1L9X6	4.00	6.00			
		LDC	initial 1/4 mile	1LDHJ	54.00	95.00	25.00		
			subsequent 1/4 mile	1LDHJ	2.00	3.50			
		Multi-point option	per LDC ¹	MPY1X	18.00	30.00	25.00		
1051	TWP7L (teletype) DAT8L (data) RMT7L (misc)	WCC	initial 1/4 mile	1L9X7	60.00	80.00	25.00	450.00	
			subsequent 1/4 mile	1L9X7	8.00	12.00			
		LDC	initial 1/4 mile	1LDFJ	56.00	100.00	25.00		
			subsequent 1/4 mile	1LDFJ	4.00	7.00			
		Multi-point option	per LDC ¹	MPY2X	18.00	30.00	25.00		

WCC - Wire Center Channel

LDC - Local Distribution Channel

NOTE 1: Multi-point service is comprised of local distribution channels as stated in Section 2.6.4 of this tariff. The multi-point option applies in addition to the LDC rates and charges.

(C/M)

3 CHANNELS

3.5 RATES AND CHARGES (Cont'd)

3.5.2 RECURRING AND NON-RECURRING CHARGES (Cont'd)

A. CHANNELS (Cont'd)

(C/M)

CHAN- NEL TYPE	CLASS OF SERVICE	CHANNEL ELEMENT	BILLING INCREMENT	USOC	CURRENT MONTHLY RATE	MAXIMUM MONTHLY RATE	NON- RECURRING CHARGES per channel	DESIGN ORDER CHARGE per order
2001	PLYVS (interex.) PLYVL (intraex.)	WCC	initial 1/4 mile	1L9X6	\$25.00	\$30.00	\$ 25.00	\$425.00
			subsequent 1/4 mile	1L9X6	3.50	6.00		
		LDC	initial 1/4 mile	1LD2J	25.00	40.00	25.00	475.00
			subsequent 1/4 mile	1LD2J	2.00	3.50		
		IWCC	initial mile	1LN2X	17.50	35.00	---	
			subsequent mile	1LN2X	2.50	4.50		
		Multi-point option	per LDC ¹	MPY1X	15.00	25.00	100.00	

DISCOUNT CHANNELS²

CHANNEL TYPE	CHANNEL ELEMENT	BILLING INCREMENT	USOC	CURRENT MONTHLY RATE
2001	WCC	initial 1/4 mile	1L9X8	\$22.50
		subsequent 1/4 mile	1L9X8	3.15
	LDC	initial 1/4 mile	1LD27	22.50
		subsequent 1/4 mile	1LD27	1.80
	IWCC	initial mile	1LN2B	15.75
		subsequent mile	1LN2B	2.25

WCC - Wire Center Channel

LDC - Local Distribution Channel

IWCC - Inter-Wire Center Channel

NOTE 1: Multi-point service is comprised of local distribution channels as stated in Section 2.6.4 of this tariff. The multi-point option applies in addition to the LDC rates and charges.

NOTE 2: See Section 3.5.1.F of this tariff for Multiple Channel Discount application criteria.

(C/M)

3 CHANNELS

3.5 RATES AND CHARGES (Cont'd)

3.5.2 RECURRING AND NON-RECURRING CHARGES (Cont'd)

(C/M)

A. CHANNELS (Cont'd)

CHAN- NEL TYPE	CLASS OF SERVICE	CHANNEL ELEMENT	BILLING INCREMENT	USOC	CURRENT MONTHLY RATE	MAXIMUM MONTHLY RATE	NON- RECURRING CHARGES per channel	DESIGN ORDER CHARGE per order
2002	PLYVS (interex.) PLYVL (intraex.)	WCC	initial 1/4 mile	1L9X7	\$35.00	\$40.00	\$ 25.00	\$425.00
			subsequent 1/4 mile	1L9X7	7.00	12.00		
		LDC	initial 1/4 mile	1LD4J	33.00	50.00	25.00	
			subsequent 1/4 mile	1LD4J	4.00	7.00		
		IWCC	initial mile	1LN4X	25.00	35.00	---	475.00
			subsequent mile	1LN4X	2.50	4.50		
		Multi-point option	per LDC ¹	MPY2X	20.00	35.00	100.00	

DISCOUNT CHANNELS²

CHANNEL TYPE	CHANNEL ELEMENT	BILLING INCREMENT	USOC	CURRENT MONTHLY RATE
2002	WCC	initial 1/4 mile	1L9X9	\$31.50
		subsequent 1/4 mile	1L9X9	6.30
	LDC	initial 1/4 mile	1LD47	29.70
		subsequent 1/4 mile	1LD47	3.60
	IWCC	initial mile	1LN4B	22.50
		subsequent mile	1LN4B	2.25

WCC - Wire Center Channel

LDC - Local Distribution Channel

IWCC - Inter-Wire Center Channel

NOTE 1: Multi-point service is comprised of local distribution channels as stated in Section 2.6.4 of this tariff. The multi-point option applies in addition to the LDC rates and charges.

NOTE 2: See Section 3.5.1.F of this tariff for Multiple Channel Discount application criteria.

(C/M)

3 CHANNELS

3.5 RATES AND CHARGES (Cont'd)

3.5.2 RECURRING AND NON-RECURRING CHARGES (Cont'd)

(C/M)

A. CHANNELS (Cont'd)

CHAN- NEL TYPE	CLASS OF SERVICE	CHANNEL ELEMENT	BILLING INCREMENT	USOC	CURRENT MONTHLY RATE	MAXIMUM MONTHLY RATE	NON- RECURRING CHARGES per channel	DESIGN ORDER CHARGE per order
2003	OMRVS (interex.) OMRVL (intraex.)	WCC	initial 1/4 mile	1L9X6	\$25.00	\$30.00	\$ 25.00	\$425.00
			subsequent 1/4 mile	1L9X6	3.50	6.00		
		LDC	initial 1/4 mile	1LD2J	25.00	45.00	25.00	475.00
			subsequent 1/4 mile	1LD2J	2.00	3.50		
		IWCC	initial mile	1LN2X	17.50	35.00	---	
			subsequent mile	1LN2X	2.50	4.50		
		Multi-point option	per LDC ¹	MPY1X	15.00	25.00	100.00	

DISCOUNT CHANNELS²

CHANNEL TYPE	CHANNEL ELEMENT	BILLING INCREMENT	USOC	CURRENT MONTHLY RATE
2003	WCC	initial 1/4 mile	1L9X8	\$22.50
		subsequent 1/4 mile	1L9X8	3.15
	LDC	initial 1/4 mile	1LD27	22.50
		subsequent 1/4 mile	1LD27	1.80
	IWCC	initial mile	1LN2B	15.75
		subsequent mile	1LN2B	2.25

WCC - Wire Center Channel

LDC - Local Distribution Channel

IWCC - Inter-Wire Center Channel

NOTE 1: Multi-point service is comprised of local distribution channels as stated in Section 2.6.4 of this tariff. The multi-point option applies in addition to the LDC rates and charges.

NOTE 2: See Section 3.5.1.F of this tariff for Multiple Channel Discount application criteria.

(C/M)